

1 **IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

2 Application Serial No.09/614,890
3 Filing DateJuly 12, 2000
3 Inventorship.....Kirovski et al.
4 ApplicantMicrosoft Corporation
Group Art Unit2136
5 ExaminerColin, Carl
Confirmation No.2503
6 Attorney's Docket No.MS1-587US
7 Title: Improved Audio Watermarking with Covert Channel and Permutations

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9 To: Honorable Commissioner for Patents
Alexandria, VA 22313-1450

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11 From: Emmanuel A. Rivera (Tel. 509-324-9256; Fax 509-323-8979)
Customer No. 22801

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13 **RESPONSE TO OCTOBER 18, 2005 NON-FINAL OFFICE ACTION**

14 Sir:

15 In response to the office action (the Action) of **October 18, 2005**, the
16 response is provided as follows:

17 Amendments to the specification begin on page 2 of this paper.

18 The listing of the claims begins on page 3 of this paper.

19 Remarks/Arguments begin on page 16 of this paper.

1 Please replace the ABSTRACT with the following:
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3 Audio signals, such as a music clip, are inserted with detectable
4 watermarks. The inserted watermark can identify the content producer and
5 provide a signature embedded in the audio signal and cannot be removed. The
6 watermark can survive all typical kinds of processing and malicious attacks. The
7 watermark can be implemented in a watermarking system that employs a covert
8 channel encoder to layer an additional information data message or covert message
9 on top of the watermark. The watermarking system can also include a permutation
10 technique to further hide the watermark and hide the covert message within the
11 watermark.